

EXHIBIT E

AQUIFER EXEMPTION COMPLIANCE SCHEDULE REGULATIONS

NOTICE OF REQUEST FOR READOPTION OF EMERGENCY RULEMAKING ACTION

REGARDING

TITLE 14. NATURAL RESOURCES DIVISION 2. DEPARTMENT OF CONSERVATION CHAPTER 4. DEVELOPMENT, REGULATION, AND CONSERVATION OF OIL AND GAS RESOURCES SUBCHAPTER 2. ENVIRONMENTAL PROTECTION

Notice Published January 7, 2016

NOTICE IS HEREBY GIVEN that the California Department of Conservation (Department) will be requesting readoption of the Aquifer Exemption Compliance Schedule Regulations emergency regulations necessary to ensure the State's federally-approved Underground Injection Control program for Class II injection wells meets the requirements of the federal Safe Drinking Water Act, and protects public health, safety and the environment in an efficient manner. These emergency regulations were originally approved by the Office of Administrative Law (OAL) and became effective on April 20, 2015. (OAL File No. 2015-0409-02E.) This action is being taken in accordance with Government Code sections 11346.1 and 11349.6 of the California Administrative Procedures Act, and California Code of Regulations, title 1, section 52. **The request for readoption of the emergency regulations will be submitted to OAL on January 15, 2016.**

DILIGENT ADOPTION OF PERMANENT REGULATIONS

Pursuant to Title 1, California Code of Regulations section 52(b)(1), the Department has made substantial progress and proceeded with diligence to comply with Government Code section 11346.1(e) by undertaking the following rulemaking activities:

- On May 29, 2015, the Department had OAL publish the Notice of Proposed Regulatory Action for the above-described regulations in the California Regulatory Notice Register (Register 2015, No. 22-Z). The Department posted all required rulemaking materials on its Website and mailed the notice to the Department's interested parties list.

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- A public comment period on the proposed permanent regulations was noticed and held from May 29, 2015 through July 13, 2015. The Department, however, continued to accept comments through July 16, 2015.
- On July 15, 2015 the Department conducted a public comment hearing in Bakersfield, CA, and on July 16, 2015 the Department conducted an additional public comment hearing in Santa Maria, CA.
- The Department has received over 1,000 comments and is in the process of organizing, summarizing, and considering input received.

A readoption of the emergency regulations will provide the additional time necessary for the Department to complete the regular rulemaking process and Certificate of Compliance.

As required by the California Code of Regulations, title 1, section 52(b)(2), there have been no changes in emergency circumstances since the original adoption of the regulations regarding Aquifer Exemption Compliance Schedule Regulations by OAL.

The Department hereby incorporates by reference the rulemaking record OAL file number 2015-0409-02E.

PUBLIC COMMENT

Government Code section 11346.1(a)(2) requires that, at least five working days prior to the Department's submission of the proposed emergency action to the OAL, the Department must provide a notice of the proposed emergency action to every person who has filed a request for notice of regulatory action with the Department. After submission of the proposed emergency to the OAL, the OAL shall allow interested persons five calendar days to submit comments on the proposed emergency regulations as set forth in Government Code section 11349.6. You may submit comments on proposed emergency regulations to:

Mail:
OAL Reference Attorney
300 Capitol Mall, Suite
1250
Sacramento, CA 95814

Fax:
(916) 323-6826

E-mail:
staff@oal.ca.gov

When you submit a comment to OAL, you must also submit a copy of your comment to the Department:

Mail:	Fax:	E-mail:
Department of Conservation	(916) 324-0948	UIC.Regulations@conservation.ca.gov
801 K Street, MS 24-02		
Sacramento, CA 95814		
ATTN: Aquifer Exemption		
Compliance Schedule		
Regulations		

OAL will confirm that the agency has received the comment before considering it. Pursuant to California Code of Regulations, title 1, section 55(b)(1-4), the comment must state that it is about an emergency regulation currently under OAL review, and include the topic of the emergency.

Adoption of emergency regulations does not require response to submitted comments. Any response to comments from the Department will be submitted to OAL within eight calendar days following the date of submission of the proposed emergency regulation to OAL, unless specific exceptions are applicable.

FINDING OF EMERGENCY

Government Code section 11346.1(b), allows a state agency to adopt emergency regulations if the agency makes a finding that the adoption of a regulation is necessary to address a situation calling for immediate action to avoid serious harm to the public peace, health, safety, or general welfare. The Department of Conservation finds that emergency adoption of the regulations proposed herein regarding a compliance schedule for eliminating injection into aquifers that are protected under the federal Safe Drinking Water Act, is necessary for immediate preservation of the public peace, health, safety, or general welfare.

Basis for the Finding of Emergency:

- ☐ In 1983, the Division of Oil, Gas and Geothermal Resources (Division) within the Department, obtained approval from the United States Environmental Protection Agency (US EPA) to implement and enforce requirements of the federal Safe Drinking Water Act for the protection of underground sources of drinking water pursuant to the State's Class II Underground Injection Control (UIC) program. The Division has primary responsibility for regulating injection wells associated with oil and gas production pursuant to the UIC program, which is subject to US EPA oversight.

- The Safe Drinking Water Act requires that an underground source of drinking water or “USDW” be protected from contamination by injection wells. USDWs are generally aquifers with water quality measured at less than 10,000 milligrams per liter of total dissolved solids (mg/L TDS), but, upon recommendation by the State, US EPA may exempt individual aquifers in accordance with criteria specified in the federal regulations. (40 C.F.R. 144.3 and 144.7 (2015).) In the course of ongoing corrective review, the Division has identified over 2,500 wells that may have been improperly approved for injection into non-exempt aquifers protected by the Safe Drinking Water Act.
- US EPA, the Division and the State Water Resources Control Board (SWRCB) have engaged in intensive discussions intended to determine the appropriate corrective actions, and those discussions have culminated in a detailed corrective action plan deemed necessary by US EPA to bring the State’s UIC program into compliance with the Safe Drinking Water Act.
- The corrective action plan calls for the Division to implement a compliance schedule for phasing out injection into USDWs, either by obtaining the necessary aquifer exemption or by halting injection into the aquifer. Specifically, US EPA’s direction set forth the following compliance deadlines:
 - October 15, 2015 – shut-in deadline for wells injecting into non-exempt, non-hydrocarbon-bearing aquifers with less than 3,000 mg/L TDS that do not have an aquifer exemption
 - December 31, 2016 – shut-in deadline for wells injecting into 11 specific aquifers historically treated as exempt by US EPA, unless US EPA takes further action to affirm exemption of the pertinent aquifer(s) before that deadline
 - February 15, 2017 – shut-in deadline for all wells injecting into non-exempt aquifers with less than 10,000 mg/L TDS that do not have an aquifer exemption
- US EPA has made clear that the Division’s failure to phase out injection in the affected aquifers by the stipulated compliance deadlines would seriously jeopardize the federal government’s ongoing approval of the State’s UIC program as an effective program to protect underground sources of drinking water as required by the Safe Drinking Water Act. One of the grounds for US EPA to withdraw primacy approval of a state program is when the state program fails to comply with the terms of the Primacy Agreement and the state fails to take corrective action satisfactory to US EPA. (40 C.F.R. § 145.33.)
- The central purposes of state primacy under the Safe Drinking Water Act is to harmonize regulation under a single regulatory entity with expertise in local geology and operations. US EPA has never directly regulated injection operations

in California and therefore does not have infrastructure or expertise in place to do so. The Division regulates over 50,000 injection wells statewide through six district offices staffed with engineers with extensive experience regulating oil and gas operations in this state. California is well known for its unique and complex geology, and knowledge of that geology is critical to effective regulation of injection operations. In addition, California has the most complex range of oil and gas extraction techniques in the world. It would therefore be a decade-long process for US EPA to develop an effective regulatory presence in a state of this size, activity, and complexity, and the ability to effectively enforce regulations would certainly suffer in the meantime. At the same time, significant regulatory uncertainty and burden would be introduced as regulation of oil and gas operations would be divided between state and federal entities. Operators would likely be faced with regulatory duplication and conflict as they would be required to comply with two separate regulatory schemes administered by two separate agencies for different aspects of the same operations. Such regulatory duplication and conflict would lower the quality of environmental protection, while increasing the regulatory burden on industry.

- ☐ The timeframe for the non-emergency rulemaking process would not enable an enforceable regulatory compliance schedule to be adopted before critical compliance deadlines will have already passed. That outcome would fail to satisfy US EPA's directions to the Division. Indeed, US EPA specifically contemplated utilization of the emergency regulation process in its directive.
- ☐ Failure to adopt the compliance schedule by emergency regulation would be detrimental to public health and safety. The wells injecting into non-exempt USDW aquifers were approved by the State, and administrative action is required to reverse those approvals. This rulemaking will unwind approvals on a statewide basis by dates certain, and will impose maximum civil penalties for injection after those dates. Without the use of rulemaking, the Division would have to use individual enforcement orders to unwind existing approvals and achieve compliance. Adjudication of enforcement orders takes time and resources, and, given the number of wells in question, it would be a substantial undertaking for the Division to achieve statewide compliance without the use of rulemaking. Without this rulemaking, it would likely take longer, and would certainly require greater State resources, to completely unwind all State-approved injection into nonexempt USDW aquifers.
- ☐ The Division anticipates that many of the aquifers previously approved to receive injection without an aquifer exemption in place will in fact qualify for exemptions. However, obtaining an aquifer exemption is a complex process involving multiple stages of rigorous examination over an extended period of time. First, operators seeking an exemption for a protected aquifer must prepare a package of evidence demonstrating that the aquifer meets the criteria for exemption. Next, the Division and the SWRCB will each independently review the evidence package to determine whether it warrants the State recommending for

an aquifer exemption. This state-level review incorporates opportunity for public participation, potentially including a public hearing and a public comment period. If the Division and the SWRCB agree, a recommendation to adopt the aquifer exemption will be submitted to US EPA. US EPA will then undertake its own review of the supporting evidence before reaching a determination to exempt the aquifer or not. US EPA's review process could potentially include publication in the Federal Register and possibly a public comment hearing. Altogether, this multi-stage aquifer exemption process could easily span the full compliance period before exemptions are in place. Defining firm deadlines and criteria immediately is necessary so that operators understand that they must start working towards obtaining any appropriate aquifer exemptions as soon as possible.

- Regulated industry operators develop long-range business plans with substantial capital investments based around the operation of injection wells. To the extent that any wells need to be shut-in, codification of the compliance schedule as an emergency regulation will provide the level of certainty operators need in order to revise their business plans accordingly. Even shut-in deadlines as far as two years into the future necessitate implementation of immediate planning considerations to avoid substantial transaction costs. This is particularly important for smaller, independent operators, who typically have less capacity to absorb sudden logistical changes and increased expenses. If the compliance schedule is not implemented as an emergency regulation, the regulated industry may incur substantial and otherwise-avoidable expenses due to prolonged uncertainty in the enforcement landscape. Smaller, independent operators would likely experience the greatest negative financial consequences.
- The 2553 injection wells potentially affected by this compliance schedule are a significant part of California's oil production infrastructure, and abrupt disruption of their operation would be detrimental to general welfare. The Division estimates the capital investment in the affected injection wells and their attendant facilities to be roughly \$1.3 billion. To the extent that alternatives can be identified to replace injection that would be halted by the compliance schedule, significant time, advance planning, and capital investment will be required to drill and construct new wells and develop facilities to replace that injection infrastructure. The Division estimates that approximately 4% of the state's oil production (about 24,000 barrels of production per day) presently relies upon the affected injection wells. In order to avoid any unnecessary disruption of this production, it is critical that the deadlines mandated by US EPA are clearly and finally articulated in regulation as soon as possible so that the regulated industry has as much time as possible to change business plans and organize investment around these compliance deadlines. To the extent that aquifers will qualify for an aquifer exemption, it is imperative that all involved understand that there are firm deadlines for completing the aquifer exemption process, and that qualifying injection operations will be disrupted if the process is not complete by the deadline.

- Oil and gas production in California is a \$34 billion annual industry, employing more than 25,000 people with an annual payroll of over \$1.5 billion. California is the third largest oil-producing state in the nation, producing about 575,000 barrels per day. Property and other tax payments to the State and local governments from the industry amount to about \$800 million annually. Injection wells have been an integral part of California's oil and gas operations for more than 50 years, and there are over 50,000 oilfield injection wells currently operating in the State.
- The regulated community and the public at large have expressed profound concern about the corrective actions to be taken regarding any injection into non-exempt aquifers protected by the Safe Drinking Water Act. It is important that the compliance schedule be implemented in an immediate and public manner, so as to maximize the transparency of the corrective actions being undertaken, as well as any associated impacts on public health and safety, the environment, or natural resources.
- In January of 2014, Governor Edmund G. Brown proclaimed an official State of Emergency due to record drought conditions in the State. The governor's proclamation directed state and local agencies to take immediate actions to conserve dwindling water supplies. California is now entering a fourth consecutive year of severe drought. Protection of California's aquifers from contamination is a matter of the highest priority for the Division, and of special importance given the exceptionally dry conditions currently affecting our region.
- Other provisions in the proposed emergency regulations, such as the definitions for key terms, and the provision setting a civil penalty for unlawful injection are included because they are integral to the regulations as a whole. The definitions support consistent interpretation of the proposed regulation, while the civil penalty provision is needed to provide an immediate deterrent that outweighs the potential economic incentives for unlawfully injecting beyond the compliance deadlines.

For these reasons, pursuant to Government Code section 11346.1(b), the Department hereby finds that adoption of the proposed regulation is necessary to address an emergency.

Insufficient Time for Non-Emergency Rulemaking

Although the Division has been engaged in an ongoing interagency review of its Class II UIC program for an extended period of time, this review process did not culminate in a definitive schedule for corrective action until March 9, 2015, when US EPA issued a directive requiring the adoption of a specific regulatory compliance schedule. The Division could not have implemented a rulemaking process for the presently-proposed regulation prior to that date because until then there had not yet been a determination of what deadlines would satisfy US EPA's demands for corrective action.

INCORPORATION BY REFERENCE

The following document is incorporated by reference into these regulations:

- *Division of Oil, Gas, and Geothermal Resources Field Boundary Specifications 1 through 9* (dated April 1, 2015).